From: Walker, Tina (DSHS)

To: Miller, Garyq

Subject: RE: SJRWP RI Report Table 5-9 Correction Date: Thursday, February 13, 2014 1:54:18 PM

Gary,

Thanks for keeping me in the loop. I'm not sure there is anything else we could add that you didn't already cover.

Tina

From: Miller, Garyg [mailto:Miller.Garyg@epa.gov] Sent: Tuesday, February 11, 2014 4:45 PM

To: Jacquelyn Young

Cc: Walker, Tina (DSHS); Turner, Philip; Sanchez, Carlos; Walters, Donn

**Subject:** RE: SJRWP RI Report Table 5-9 Correction

Jackie,

Thanks for the storm surge map, that was interesting. It looks like the Ike storm surge in 2008 reached over 14 ft north of the waste pits – did the water cover the land in north Highlands? Could the storm surge water have entered wells from the top?

On the bis(2-ethylhexyl)phthalate [also known as di(2-ethylhexyl)phthalate or DEHP], the drinking water standard for public water supply systems is the Maximum Contaminant Level (MCL) – here is a link that discusses it - <a href="http://water.epa.gov/drink/contaminants/">http://water.epa.gov/drink/contaminants/</a>. The MCL for bis(2-ethylhexyl)phthalate is 6 ug/L (micrograms per liter), or ppb. So, anything under 6 ppb would be OK for a drinking water system. The highest measured value in the 6 sampled Highland wells at 3.9 ug/L is less than the MCL and therefore OK.

Another factor is that the bis(2-ethylhexyl)phthalate results are qualified by a "B", meaning it was "blank related" or it was found in some of the lab control samples where it shouldn't have been present. The lab control samples are prepared at the lab to check the quality/accuracy of the sample preparation & analysis methods. Bis(2-ethylhexyl)phthalate is a common lab contaminant – here is a link that discusses it - <a href="http://www.atsdr.cdc.gov/toxprofiles/tp9-c7.pdf">http://www.atsdr.cdc.gov/toxprofiles/tp9-c7.pdf</a> (top 2 paragraphs). The way that EPA lab handles this is if the environmental sample is not at least 10 times higher than the concentration in a laboratory blank, then the presence of the bis is qualified as "suspect", or uncertain.

One final note on the bis, in the health assessment prepared by the Texas Dept. of State Health Services, the CREG, or "cancer risk evaluation guide" is 2.5 ug/L. In the health assessment, it defines the comparison values as follows – "Exceeding this screening value does not indicate that a contaminant will cause adverse health effects; it only indicates that the contaminant needs further evaluation." The health assessment goes on to evaluate the cancer risk for bis on the bottom of p. 4; the resulting lifetime cancer risk is  $3.12 \times 10^{-6}$ . The EPA defines a "protective" cancer risk range



-4 -6

of between 10 to 10 so the calculated risk is at the low end of the protective range & unlikely to cause cancer.

So, the bis(2-ethylhexyl)phthalate in the sample results are all less than the MCL standard, are at the low risk end of the protective cancer risk range, and may be a result of laboratory contamination, all show that the bis is not a significant health concern.

Tina/Phil – please feel free to add anything you wish to this.

.....

Regarding the sample results from the monitoring wells at the southern impoundment, the maximum results for arsenic, 2,3,7,8-TCDD, benzene and bis(2-ethylhexyl)phthalate from the monitoring wells (all 6 wells) is as follows:

Arsenic - max result 0.0105 mg/l; MCL - 0.01 mg/L

2,3,7,8-TCDD - max result 43.3 pg/L; MCL - 30 pg/L

Benzene – max result 5 ug/L; MCL – 5 ug/L

Bis(2-ethylhexyl)phthalate – 0.2 ug/L; MCL 6 ug/L

These first three wells (MWs 001, 002, and 003) were installed in the northern part of the southern impoundment within the shallow disturbed (fill) zone. Several of chemicals from these wells were at or above their MCL, so there was another round of ground water wells (3 more wells) installed to the south of these 1<sup>st</sup> three. The area to the south was chosen because that was the area with the highest dioxin concentration in the soil borings. Attached is a map all of the southern impoundment monitoring wells. Two new wells were added in the shallow disturbed zone (about 20 ft deep; same zone as the 1<sup>st</sup> three wells), and one was in the deeper aquifer (83 ft deep). The deeper zone is the upper part of the Chicot Aquifer, which is separated from the shallow zone by the Beaumont Clay. This deeper well was drilled into the upper Chicot Aquifer to see if anything had migrated down through the Beaumont Clay. The results from the Upper Chicot Aquifer are as follows:

Arsenic – max result 0.00233 mg/l; MCL - 0.01 mg/L

2,3,7,8-TCDD – not detected (all other dioxins/furans were non-detect too).

Benzene – max result 0.08 ug/L; MCL – 5 ug/L

Bis(2-ethylhexyl)phthalate – not detected.

So, the dioxin/furans are not in the Upper Chicot Aquifer below the southern impoundment. All of the southern impoundment groundwater results are in the attached Table 3-1. This isn't on the San Jacinto website yet, but should be sometime next week. Please let me know if you would like to

discuss this further.

Regards,

Gary Miller
EPA Remedial Project Manager
214-665-8318
miller.garyg@epa.gov

**From:** Jacquelyn Young [mailto:jeyoung@texanstogether.org]

Sent: Monday, February 10, 2014 2:30 PM

To: Miller, Garyg

Subject: Re: SJRWP RI Report Table 5-9 Correction

Hi Gary,

Thank you for the power points!

My concern for groundwater is regarding both the wells at the site and the private water wells. I know my family became the most ill after hurricane Ike, it is also not uncommon to hear this same story in town. Our water was almost of a jello consistency and was filled with sediment. We at the time didn't know any better than to use it, we thought it was maybe a little dirt. Very dumb, now I know, but we were told we had a pristine, protected aquifer. If you look at this simulation data, you can see how the water was carried north then northeast <a href="http://chg.ices.utexas.edu/images/surge\_wind\_slower.gif">http://chg.ices.utexas.edu/images/surge\_wind\_slower.gif</a>

My point with that is that I don't think every day there is dioxin found in the wells north of the site, but I am not convinced that in time it hasn't occurred. Maybe my dad got chloracne because of some other reason, but it is all too coincidental our water was riddled with sediment after the last hurricane then we all got sick and my father developed chloracne. I feel like risking one hurricane season to remove this source makes way more sense than leaving it and risking every hurricane season to come.

My reference to Bis(2-ethylhexyl)phthalate and lead were from the private wells the EPA sampled. Bis(2-ethylhexyl)phthalate found at 3.9 micrograms/L in 4 wells and the table on page four of the health consultation shows 2.5 as the CREG. Yet these people were sent letters saying their water is ok- I just don't get that. I don't feel like the state is looking out for us. On page 4 there is a column that is labeled "Number of Wells that Exceed Comparison Value", and on the row designated for Bis(2-ethylhexyl)phthalate, under this column, it states 4. So from my understanding there is something they are able to compare it to, found something out of the norm, and still sent letters to these sick people saying it's ok. It might not have been dioxin, but I don't think that means its ok.

Regarding the sample wells near the site, I referred to arsenic, 2,3,7,8-TCDD, benzene and again Bis(2-ethylhexyl)phthalate which I read on table 6-12, pages 1-3. If I have interpreted this wrong, please let me know I would like to be wrong!

Our efforts regarding this project have received a lot of media attention over the last two months- which is what Ron advised we ramp up. I spoke with him twice last week at the luncheon here in Houston. I handed him two packets- one filled with media coverage and the other filled with letters from the community asking for the EPA to remove the site. Would

you be interested in seeing the community letters?

I am hosting a coalition meeting tomorrow in the community where Lisa Gossett will give a presentation about the superfund process. After the January 30 meeting we realized the importance of educating the newly engaged community members about the superfund process and the EPA's role in the process.

Thank you, Jackie Young

On Feb 4, 2014, at 12:10 PM, Miller, Garyg < Miller. Garyg@epa.gov > wrote:

Thanks for the info.

Here is the Power Point – part 1 of 2; the rest in another email.

I wanted to get back to you on the ground water; at the meeting the concentration numbers you mentioned, were they at the waste pits or for the private wells?

FYI, the ground water well installation (shallow & deeper wells) is described on page 2-29 (and Figs 2-12, 3-6) of the Remedial Investigation Report on the EPA website.

Gary Miller
EPA Remedial Project Manager
214-665-8318
miller.garyg@epa.gov

**From:** Jacquelyn Young [mailto:jeyoung@texanstogether.org]

Sent: Monday, February 03, 2014 2:15 PM

To: Miller, Garyg

**Subject:** Re: SJRWP RI Report Table 5-9 Correction

Gary,

If you have the capacity to cover all of Highlands and Channelview, I think that would be ideal. However, these are the areas that I know desperately need attention are: Highlands- Grace Lane, Barbers Hill Rd/Madeline St, Park St, Pin Oak Dr, Clear Lake Rd. Channelview- River Rd, Meadowbrook Rd, Fairmont Dr.

Would it be possible for you to share your powerpoint from the meeting?

Also, at next week's coalition meeting, Dr Lisa Gossett is going to give a presentation to the community regarding the EPA and superfund process. The idea is to build an educated, organized coalition in the community, so that they know you all are not the bad guys and the process is understood.

Thank you, Jackie Young

On Jan 31, 2014, at 3:50 PM, Miller, Garyg < Miller.Garyg@epa.gov > wrote:

Thanks Jackie. That was a lively meeting, but not totally unusual. We did get a lot of feedback that will help. One thing, if a disease cluster study was done for the area, based on your discussions with the folks - what would be some good areas to include? Areas around I-10 on either side of the river? Areas several miles north of I-10? All of Channelview & Highlands? Any input would be appreciated.

Thanks,

Gary Miller
EPA Remedial Project Manager
214-665-8318
miller.garyg@epa.gov

**From:** Jacquelyn Young [mailto:jeyoung@texanstogether.org]

**Sent:** Friday, January 31, 2014 1:39 PM

To: Miller, Garyg

**Subject:** Re: SJRWP RI Report Table 5-9 Correction

Hi Gary,

Thank you for sending me this update. Also, thank you for hosting the meeting last night. I wish you would of been able to present more but it was such a tough crowd. I was not expecting people to be so fired up. I of course understand because I too eventually got frustrated and upset. We all live burdened by the environment there- whether its from air, water or soil. We just want to see the state and the federal level communicate and do what's best for the community. When I am in the community I express that you are on our side but that you are bound by standard procedures and laws. I think that is something that was missed last night, I think it was a lot of folks first time to go to the meeting and they simply don't understand this stuff does take a long time to resolve.

I will continue my work engaging the community but now am aware more than ever I need to make it clear your office is not the enemy.

I plan to go door to door next week around the first couple of streets in town. I hope to come across the woman who mentioned her well was tested and heavy metals were found. Whatever data I get my hands on I will send your way.

Thanks again for all your help.

Jackie Young

On Jan 31, 2014, at 10:56 AM, Miller, Garyg < Miller. Garyg@epa.gov > wrote:

Jackie,

There was an error in the final RI Report & this table corrects it.

Regards,

Gary Miller
EPA Remedial Project Manager
214-665-8318
miller.garyg@epa.gov

From: Jennifer Sampson [mailto:jsampson@integral-corp.com]

Sent: Thursday, January 30, 2014 8:04 PM

To: Miller, Garyg

Cc: David Keith; Philip J Slowiak; Dave Moreira (dmoreira@wm.com)

Subject: SJRWP RI Report Table 5-9 Correction

Hi Gary-

Integral has investigated the question you had about the TEQ statistics for sediment presented in Table 5-9 of the May, 2013 Final Remedial Investigation Report, and have found the table to be in error. The error resulted from the analyst incorrectly substituting the "total dioxins and furans" in the last line of the table, instead of the "TEQ $_{\rm DF}$ " concentrations; we thoroughly checked the other tables in the report and do not expect this sort of problem elsewhere.

The error has been corrected, and the corrected table is attached. The corrected table has been inserted into the PDF of the report posted on the wiki, and the single page with only this table has also been posted for the convenience of others.

I will send you this table in hardcopy tomorrow.

I apologize for any confusion caused by this error.

CERCLA Docket 06-03-10.

## Jennifer

Jennifer Sampson | Senior Managing Scientist Integral Consulting Inc. | www.integral-corp.com 411 1st Avenue S., Suite 550 | Seattle, WA 98104

Tel: 206.957.0351 | Cell: 360.286.7552 | Fax: 206.230.9601

HEALTH ENVIRONMENT TECHNOLOGY SUSTAINABILITY

This electronic message and attachments may contain information that is joint defense privileged, privileged and/or confidential attorney work product prepared in anticipation of litigation. The contents are intended to be for the use of the person named above. If you are not the intended recipient, please be aware that any disclosure, copying, distribution, or use of the contents of this information is prohibited. If you have received this

electronic transmission in error, please contact the sender by telephone at 206 230-9600 or by email at <a href="mailto:isampson@integral-corp.com">isampson@integral-corp.com</a>. <a href="mailto:klephone">klephone</a> at 206 230-9600 or by email at <a href="mailto:isampson@integral-corp.com">isampson@integral-corp.com</a>. <a href="mailto:klephone">klephone</a> at 206 230-9600 or by email at <a href="mailto:isampson@integral-corp.com">isampson@integral-corp.com</a>. <a href="mailto:klephone">klephone</a> at 206 230-9600 or by email at <a href="mailto:isampson@integral-corp.com">isampson@integral-corp.com</a>. <a href="mailto:klephone">klephone</a> at 206 230-9600 or by email at <a href="mailto:isampson@integral-corp.com">isampson@integral-corp.com</a>.

<San Jacinto Community Meeting part 1 of 2 1-30-2014.pptx>